INDEX TO VOLUME XIII

ACIDITY and hydrogen ion concentration of ice cream mixes, Relation between titratable..... 417
Aging of the ice cream mix, The effect of initial cooling temperature on gelatin in the..... 406
Air in butter..... 461
American Dairy Science Association, Minutes of meeting of advanced registry section..... 78
American Dairy Science Association, Proceedings of the 25th annual meeting of..... 528
Analysis of butter, Chemical..... 380
Analysis of butter, Suggested methods for the microbiological. 394
Analysis of dry skim milk, Grades and methods of..... 319
ANDERSON, ARTHUR K., GAYLEY, HOWARD E., and PRATT, AVERY D. Studies on the chemical composition of bovine blood..... 336
Anemia of albino rats. Studies on the nutritive value of milk. IV. The supplementary value of yeast in nutritional..... 246
Antirachitic properties and its artificial activation, Fat soluble vitamins. 31. Butterfat: its... 497
ARCHIBALD, J. G. (See Lindsey, J. B.)..... 102
(Ash) Seasonal variations in certain inorganic constituents of dry milk produced in New York and Wisconsin..... 522

BACTERIA) Observations on ropiness in butter cultures..... 69
(Bacteria) Variations in streptococcus lactis..... 64
Bacterial content of the fore milk of cows, A study of the..... 449
Bacterial endospores, Effect of the electropure process of treating milk upon..... 368
Bacteriological examination of ice cream, A comparison of the volumetric and gravimetric methods for..... 40
(Bacteriology) Quantitative changes in the microfloro of butter during storage..... 266
(Bacteriology) Suggested methods for the microbiological analysis of butter..... 394
BEAVENS, E. ARTHUR. The effect of lactose on the survival of Escherichia coli when heated to 145°F. for thirty minutes..... 91
BEAVENS, E. ARTHUR. The Escherichia-Aerobacter group as an index to proper pasteurization... 94
BECKER, R. B., and MCGILLIARD, P. C. Measuring the influence of Hormone and mechanical stimulation by means of a non-fecund lactation..... 372
BIRD, E. W., and SANDS, G. C. The effect of lipins on the fat test of buttermilk..... 453
Blood of dairy cattle, Normal variations in the calcium content of the..... 351
Blood of dairy cattle, Normal variations in the organic phosphorus of the..... 174
Blood plasma of dairy cattle. Application of results to bone mineralization. The biometry of calcium and inorganic phosphorus in..... 360
Blood serum, Effect of a diet of sweet clover on the calcium in the..... 424

Blood, Studies on the chemical composition of bovine..... 336
Bone mineralization. The biometry of calcium and inorganic phos horus in the blood plasma of dairy cattle. Application of results to..... 360
Book reviews..... 349
Bovine blood, Studies on the chemical composition of..... 336
BUDGE, W. K. (See Dahle, C. D.). 417
Butter, Air in..... 461
Butter, Chemical analysis of..... 380
Butter cultures, Observations on ropiness in..... 69
Butter during storage, Quantitative changes in the microfloro of. 266
Butter on the freezing properties of ice cream mix, The influence of the use of..... 1
Butter, Suggested methods for the microbiological analysis of..... 406
Butter Fat: Its antirachitic properties and its artificial activation. Fat soluble vitamins. 31, 497
Butterfat production, A study of the relation between the time a cow is carried in utero and her mature equivalent..... 196
(Buttermilk) Factors influencing the properties of fermented reconstructed milk..... 124
Buttermilk, The effect of lipins on the fat test of..... 453

CALCIUM and inorganic phosphorus in the blood plasma of dairy cattle. Application of results to bone mineralization, The biometry of..... 360
Calcium and phosphorus metabolism of heavily milking cows, The..... 432
Calcium content of the blood of dairy cattle, Normal variations in the..... 351
Calcium in the blood serum, Effect of a diet of sweet clover on the... 424
CANNON, C. Y., and GREENWOOD, DELBERT. Effect of a diet of sweet clover on the calcium in the blood serum..... 424
Cattle. Application of results to bone mineralization. The biometry of calcium and inorganic phosphorus in the blood plasma of dairy..... 360
Cattle during reproduction and lactation, Cottonseed meal studies. III. Heavy feeding of cottonseed meal to dairy..... 478
Cattle, Normal variations in the calcium content of the blood of dairy..... 351
Cattle, Normal variations in the inorganic phosphorus of the blood of dairy..... 174
Cheese, A case of sandiness in processed..... 288
Cheese, Some observations on processed..... 203
Clover on the calcium in the blood serum, Effect of a diet of sweet... 424
Colon-Aerogenes group on ice cream. I. Survival of members of the Escherichia-Aerobacter group to pasteurizing temperatures in ice cream. Significance of..... 273
Color of evaporated milks..... 25
COMBS, W. B. (See Eckles, C. H.). 308
Composition of bovine blood, Studies on the chemical..... 336
Cooling temperature on gelatin in the aging of the ice cream mix, The effect of initial..... 406
COPELAND, LYNN. Length of gestations in Jersey cows..... 257
Cottonseed meal studies. III. Heavy feeding of cottonseed meal to dairy cattle during reproduction and lactation..... 478
COULTER, E. W. (See Fabian, F. W.)..... 273
Cow is carried in utero and her mature equivalent butterfat pro-

duction, A study of the relation between the time a..... 196
Cows, Length of gestations in Jersey..... 257
Cows, Mineral Supplements for Dairy..... 102
Cows, The calcium and phosphorus metabolism of heavily milking... 432
Cream for market purposes, The sterilization of sweet..... 159
CUNNINGHAM, W. S. (See Palmer, L. S.)..... 174

DAHLE, C. D., BUDGE, W. K., and KEITH, J. I. Relation between titratable acidity and hydrogen ion concentration of ice cream mixes..... 417
DERBY, PAUL. (See Eckles, C. H.). 308
DEVEREUX, E. D. (See Gelpi, A. J., Jr.)..... 368
Diet of sweet clover on the calcium in the blood serum, Effect of a... 424

ECKLES, C. H., COMBS, W. B., and DERBY, PAUL. Thlaspi Arvense (French Weed) in relation to dairy products..... 308
ECKLES, C. H. (See Palmer, L. S., ...174, 351
ECKLES, C. H. (See Schaefer, O. G.)..... 165
Electropure process of treating milk upon bacteria endospores, Effect of the..... 368
ELTING, E. C. (See LaMaster, J. P.)..... 196
Escherichia-Aerobacter group as an index to proper pasteurization. The..... 94
Escherichia-Aerobacter group to pasteurizing temperatures in ice cream. Significance of colon-aerogenes group in ice cream. I. Survival of members of the.... 273
Escherichia coli when heated to 145°F. for thirty minutes, The effect of lactose on the survival of..... 91
Evaporated milks, Color of..... 25

FABER, JACK. A study of the bacterial content of the fore milk of cows..... 449
FABIAN, F. W., and COULTER, E. W. Significance of colon-aerogenes group in ice cream. I. Survival of members of the Escherichia-Aerobacter group to pasteurizing temperatures in ice cream..... 273
Fat soluble vitamins. 31. Butterfat: Its antirachitic properties and its artificial activation..... 497
Fat test of buttermilk, The effect of lipins on the..... 453
FAY, A. C. A comparison of the volumetric and gravimetric methods for bacteriological examination of ice cream..... 40
Feed requirements and the feed cost of the dairy sire, The..... 165
Feeding of cottonseed meal to dairy cattle during reproduction and lactation, Cottonseed meal studies III. Heavy..... 478
Fermented reconstructed milk, Factors influencing the properties of..... 124
(Flavor) Thlaspi arvense (French Weed) in relation to dairy products..... 308
FLEMING, R. S. (See Thompson, E. C.)..... 319
Foam on milk, Some factors influencing the volume of..... 48
Freezing properties of ice cream mix, The influence of the use of butter on the..... 1

GAYLEY, HOWARD E. (See Anderson, Arthur K.)..... 336
Gelatin in the aging of the ice cream mix, The effect of initial cooling temperature on..... 406

GELPI, A. J., JR., and DEVEREUX, E. D. Effect of the electropure process of treating milk upon bacterial endospores..... 368
Gestations in Jersey cows, Length of..... 257
GIFFORD, WARREN. The reliability of bi-monthly tests..... 81
GORTNER, R. A. (See Palmer, L. S.)..... 360
GRAVES, R. R. Proceedings of the 25th annual meeting of American Dairy Science Association..... 528
GREENWOOD, DELBERT. (See Cannon, C. Y.)..... 424
GUTHRIE, E. S. Air in butter..... 461
GUTHRIE, E. S. Chemical analysis of butter..... 380

HAMMER, B. W. Observations on ropiness in butter cultures. 69
HAMMER, B. W. Variations in Streptococcus lactis..... 64
HASTINGS, E. G. (See Thornton, H. R.)..... 221
HENDERSON, J. L. (See Roadhouse, C. L.)..... 117
HOLM, GEORGE E. (See Webb, Byron H.)..... 25
Hormone and mechanical stimulation by means of a non-fecund lactation, Measuring the influence of..... 372
HUFFMAN, C. F., and MOORE, L. A. Cottonseed meal studies III. Heavy feeding of cottonseed meal to dairy cattle during reproduction and location..... 478
HUFFMAN, C. F., ROBINSON, C. S., and WINTERS, O. B. The calcium and phosphorus metabolism of heavily milking cows..... 432
Hydrogen ion concentration of ice cream mixes, Relation between titratable acidity and..... 417

ICE cream, A comparison of the volumetric and gravimetric methods for bacteriological examination of..... 40
Ice cream, A new form of lactose crystal found in sandy..... 471
Ice cream mix, The effect of initial cooling temperature on gelatin in the aging of the..... 406
Ice cream mix. The influence of the use of Butter on the Freezing Properties of..... 1
Ice cream mixes, Relation between titratable acidity and hydrogen ion concentration of..... 417
Ice cream. I. Survival of members of the Escherichia-Aerobacter group to pasteurizing temperatures in ice cream. Significance of colon-aerogenes group in..... 273
Inorganic constituents of dry milk produced in New York and Wisconsin, Seasonal variations in certain..... 522

KEITH, J. I. (See Dahle, C. D.) 417
KRAUSS, W. E. Studies on the nutritive value of milk. IV. The supplementary value of yeast in nutritional anemia of albino rats..... 246

LACTATING mammary gland, The physiological effect of pituitary extract (posterior lobe) on the..... 8
Lactation, Cottonseed meal studies III. Heavy feeding of cottonseed meal to dairy cattle during reproduction and..... 478
Lactation, Measuring the influence of hormone and mechanical stimulation by means of a non-fecund. 372
Lactose and chloride content and taste of milk, The influence of molasses and sodium chloride in dairy rations on the..... 117
Lactose crystal found in sandy ice cream, A new form of..... 471

Lactose in some milk products, α and β..... 140
Lactose on the survival of Escherichia coli when heated to 145°F. for thirty minutes, The effect of. 91
LaMaster, J. P., and Elting, E. C. A study of the relation between the time a cow is carried in utero and her mature equivalent butterfat production..... 196
Lindsey, J. B., and Archibald, J. G. Mineral supplements for dairy cows..... 102
Lipins on the fat test of buttermilk, The effect of..... 453

MACY, H. Quantitative changes in the microfloro of butter during storage..... 266
Mammary gland, The physiological effect of pituitary extract (posterior lobe) on the lactating.... 8
McGilliard, P. C. (See Becker, R. B.)..... 372
Metabolism of heavily milking cows, The calcium and phosphorus..... 432
Methylene blue reduction test. Studies on oxidation-reduction in milk, The..... 221
Microfloro of butter during storage, Quantitative changes in the. 266
Milk, Factors influencing the properties of fermented reconstructed..... 124
Milk of cows, A study of the bacterial content of the fore..... 449
Milk, produced in New York and Wisconsin, Seasonal variations in certain inorganic constituents of dry..... 522
Milk products, α and β lactose in some..... 140
Milk, Some factors influencing the volume of foam on..... 48
Milk. IV. The supplementary value of yeast in nutritional anemia of albino rats. Studies on the nutritive value of..... 246
(Milk) Thlaspi Arvense (French weed) in Relation to Dairy Products..... 308
Milk upon bacterial endospores, Effect of the electropure process of treating..... 368
Milks, Color of evaporated..... 25
Mineral supplements for dairy cows..... 102
(Mineral) Seasonal variations in certain inorganic constituents of dry milk produced in New York and Wisconsin..... 522
Molasses and sodium chloride in dairy rations on the lactose and chloride content and taste of milk, The influence of..... 117
Moore, L. A. (See Huffman, C. F.)..... 478

NUTRITIVE value of milk. IV. The supplementary value of yeast in nutritional anemia of albino rats. Studies on the..... 246
(Nutrition) Fat soluble vitamins. 31. Butterfat: Its antirachitic properties and its artificial activation..... 497

OFFICIAL testing) The reliability of bi-monthly tests.... 81
Oxidation-reduction in milk. The methylene blue reduction test. Studies on..... 221

PALMER, L. S., Cunningham, W. S., and Eckles, C. H. Normal variations in the inorganic phosphorus of the blood of dairy cattle..... 174
Palmer, L. S., and Eckles, C. H. Normal variations in the calcium content of the blood of dairy cattle..... 351
Palmer, L. S., Gortner, R. A., and Rude, Rachel. The biometry of calcium and inorganic phosphorus in the blood plasma

of dairy cattle. Application of results to bone mineralization... 360
PARFITT, E. H. Suggested methods for the microbiological Analysis of Butter..... 394
(Pasteurization) Effect of the electropure process of treating milk upon bacterial endospores..... 368
(Pasteurization) The effect of lactose on the survival of Escherichia coli when heated to 145°F. for thirty minutes..... 91
Pasteurization, The Escherichia-Aerobacter group as an index to proper..... 94
Pasteurizing temperatures in ice cream. Significance of colon-aerogenes group in ice cream. I. Survival of members of the Escherichia-Aerobacter group to. 273
PETER, P. N. (See Williams, O. E.)..... 471
Phosphorus in the blood plasma of dairy cattle. Application of results to bone mineralization. The biometry of calcium and inorganic..... 360
Phosphorus metabolism of heavily milking cows, The calcium and.. 432
Phosphorus of the blood of dairy cattle, Normal variations in the inorganic..... 174
Pituitary extract (posterior lobe) on the lactating mammary gland, The physiological effect of..... 8
PRATT, AVERY D., and WHITE, GEORGE C. Optimum amount of silage in the dairy ration for most economical production..... 291
PRATT, AVERY D. (See Anderson, Arthur K.)..... 336
Production, Optimum amount of silage in the dairy ration for most economical..... 291
Products, Thlaspi Arvense (French Weed) in relation to dairy..... 308
QUALITY) Thlaspi Arvense (French Weed) in relation to dairy products..... 308
RATION for most economical production, Optimum amount of silage in the dairy..... 291
Rations on the lactose and chloride content and taste of milk, The influence of molasses and sodium chloride in dairy..... 117
REID, WM. H. E., and WELCH, F. F. Factors influencing the properties of fermented reconstructed milk..... 124
Reproduction and lactation. Cottonseed meal studies III. Heavy feeding of cottonseed meal to dairy cattle during..... 478
ROADHOUSE, C. L., and HENDERSON, J. L. The influence of molasses and sodium chloride in dairy rations on the lactose and chloride content and taste of milk..... 117
ROBINSON, C. S. (See Huffman, C. F.)..... 432
Ropiness in butter cultures, Observations on..... 69
RUDE, RACHEL. (See Palmer, L. S.)..... 360
RUEHE, H. A. (See Sanmann, F. P.)..... 48
SANDINESS in processed cheese, A case of..... 288
SANDS, G. C. (See Bird, E. W.)... 453
Sandy ice cream, A new form of lactose crystal found in..... 471
SANMANN, F. P., and RUEHE, H. A. Some factors influencing the volume of foam on milk..... 48
SCHAEFER, O. G., and ECKLES, C. H. The feed requirements and the feed cost of the dairy sire.... 165
SHARP, PAUL FRANCIS. (See Troy, H. C.)..... 140

Silage in the dairy ration for most economical production. Optimum amount of..... 291
Sire, The feed requirements and the feed cost of the dairy..... 165
Skim milk, Grades and methods of analysis of dry..... 319
SLAUGHTER, I. S. (See Turner, C. W.)..... 8
SLEMMONS, W. S. (See Thompson, E. C.)..... 319
Sodium chloride in dairy rations on the lactose and chloride content and taste of milk, The influence of molasses and..... 117
SOMMER, H. H. A case of sandiness in processed cheese..... 288
SOMMER, H. H. (See Templeton, Hugh L.)..... 203
STEENBOCK, H., and WIRWICK, ALICE M. Fat soluble vitamins. 31. Butter fat: Its antirachitic properties and its artificial activation..... 497
Sterilization of Sweet cream for market purposes, The..... 159
Storage, Quantitative changes in the microflora of butter during.. 266
Streptococcus lactis, Variations in. 264
SUPPLEE. Seasonal variations in certain inorganic constituents of dry milk produced in New York and Wisconsin..... 522

TASTE of milk, The influence of molasses and sodium chloride in dairy rations on the lactose and chloride content and..... 117
TEMPLETON, HUGH L., and SOMMER, H. H. Some observations on processed cheese..... 203
Test of buttermilk. The effect of lipins on the fat..... 453
Tests, The reliability of bimonthly..... 81
THOMPSON, E. C. SLEMMONS, W. S., and FLEMING, R. S. Grades and methods of analysis of dry skim milk..... 319
THORNTON, H. R., and HASTINGS, E. G. Studies on oxidation-reduction in milk. The methylene blue reduction test..... 221
TROY, H. C., and SHARP, PAUL FRANCIS. α and β lactose in some milk products..... 140
TURNER, CHAS. W., and SLAUGHTER, I. S. The physiological effect of pituitary extract (posterior lobe) on the lactating mammary gland..... 8

UTERO and her mature equivalent butter fat production, A study of the relation between the time a cow is carried in..... 196

VITAMINS. 31. Butter fat: Its antirachitic properties and its artificial activation. Fat soluble..... 497

WEBB, B. H. The sterilization of sweet cream for market purposes..... 159
WEBB, BYRON H., and HOLM, GEORGE E. Color of evaporated milks..... 25
WELCH, F. F. (See Reid, Wm. H. E.)..... 124
WHITAKER, RANDALL. The influence of the use of butter on the freezing properties of ice cream mix..... 1
WHITE, GEORGE C. (See Pratt, Avery D.)..... 291
WILLIAMS, O. E., and PETER, P. N. A new form of lactose crystal found in sandy ice cream..... 471
WINTERS, O. B. (See Huffman, C. F.)..... 432
WIRICK, ALICE M. (See Steenbock, H.)..... 497
WRIGHT, K. E. The effect of initial cooling temperature on gelatin in the aging of the ice cream mix..... 406